

# Material Safety Data Sheet



## CHLORINATING TRICHLOR GRANULES

---

### SECTION I - IDENTIFICATION

---

MANUFACTURER'S NAME .....Haviland Consumer Products, Inc.  
MANUFACTURER'S ADDRESS .....421 Ann St., N.W., Grand Rapids, MI 49504  
PHONE NUMBER..... (616) 361-6691  
EMERGENCY PHONE NUMBER .....CHEMTREC (800) 424-9300  
EFFECTIVE DATE.....4/21/03  
TRADE NAME.....**CHLORINATING TRICHLOR GRANULES**  
CHEMICAL FAMILY.....Chlorinated Isocyanurates

---

### SECTION II - HAZARDOUS INGREDIENTS

---

HAZARDOUS INGREDIENTS	OSHA PEL	TLV (Units)	CAS NUMBER
Trichloroisocyanuric Acid	Not Established	3 mg/m <sup>3</sup> =1ppm for chlorine gas STEL	87-90-1

---

### SECTION III - PHYSICAL DATA

---

BOILING POINT ..... No Information Available  
FREEZING POINT ..... 225-230°C (Decomposes)  
VAPOUR PRESSURE ..... No Information Available  
VAPOUR DENSITY (air=1) ..... No Information Available  
SOLUBILITY IN H<sub>2</sub>O..... 12 g/liter at 25°C  
ODOUR AND APPEARANCE ..... White powder; Slight Chlorine Odor  
SPECIFIC GRAVITY ..... No Information Available  
pH..... 1% Solution: 2.7 - 3.3

---

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

---

FLASHPOINT AND METHOD OF DETERMINATION ..... Will Not Burn  
LOWER EXPLOSIVE LIMIT (% by Volume) ..... Not Applicable  
UPPER EXPLOSIVE LIMIT (% by Volume) ..... Not Applicable  
MEANS OF EXTINCTION..... Water and CO<sub>2</sub>. Do not use powder based on ammonium salt and halogenous extinguishing media.  
SPECIAL FIRE FIGHTING PROCEDURES..... Extinguish with large quantities of water (small amounts may aggravate situation). Product is not flammable, but may decompose at high temperatures, thus emitting toxic gases. If able, isolate unaffected drums by taking them to a well-ventilated area to consume. For small fires CO<sub>2</sub> extinguishers can be used.  
UNUSUAL FIRE HAZARD..... Small quantities of water react with product's chlorinating composition to form hazardous quantities of nitrogen trichloride which is violently explosive. May give off toxic gases - Must use large amounts of water.

---

# Material Safety Data Sheet

---

---

## SECTION V - HEALTH HAZARD DATA

---

---

CARCINOGENICITY, REPRODUCTIVE EFFECTS ..... None  
NTP? ..... No  
IARC MONOGRAPHS? ..... No  
OVER EXPOSURE EFFECTS ..... Eventual ulceration to skin.  
PRIMARY ROUTE(S) OF ENTRY ..... Skin Contact  
SPECIFIC FIRST AID PROCEDURES ..... In case of eye contact: Flush immediately with plenty of water for at least 15 minutes and get medical attention; for skin, wash thoroughly with soap and water; wash contaminated clothing before reuse. If irritation persists, call a doctor. If inhaled: Remove to fresh air. If swallowed: Drink milk, water or raw egg whites. Get medical attention. Do not induce vomiting.  
EXPOSURE AGGRAVATED MEDICAL CONDITIONS ..... None Currently Known

---

---

## SECTION VI - REACTIVITY DATA

---

---

CHEMICAL STABILITY ..... Stable  
CONDITIONS TO AVOID ..... Humidity and temperatures over 50°C.  
INCOMPATIBLE MATERIALS ..... Product attacks metal in general. It reacts with water in small quantities, oxidant and reducing agents, acids, alkalis, nitrogen products, ammonium salts, urea, amines, quaternary ammonium derivatives, oils, fats, peroxides, ationic tensioactives, etc.  
HAZARDOUS DECOMPOSITION PRODUCTS ..... In combination with the above-mentioned products, it decomposes and gives off a great quantity of heat, chlorine, nitrogen trichloride etc. with subsequent danger of explosion if nitrogen trichloride level is high enough.  
HAZARDOUS POLYMERIZATION ..... Will Not Occur  
POLYMERIZATION AVOID ..... Not Applicable

---

---

## SECTION VII - SPILL OR LEAK PROCEDURE

---

---

LEAK AND SPILL PROCEDURES ..... Prevent product from reaching sewage or superficial waters. If product reaches a natural watercourse, warn civil protection authorities. Sweep and fully collect spilled product. Can be re-used if not contaminated. Contaminated product must be destroyed.  
WASTE DISPOSAL ..... Use with sodium carbonate & sodium sulfite to neutralize. After dilute with a lot of water and can be poured into sewer, according to local, federal and state regulations. Dry product mix with solvents and incinerate with wash for chlorine combustion gas.

---

---

## SECTION VIII - SPECIAL PROTECTION

---

---

RESPIRATORY PROTECTION ..... NIOSH approved full facepiece with airborne exposure limits are exceeded.  
VENTILATION ..... To maintain dusts below limits.  
PROTECTIVE GLOVES ..... Rubber or other impervious materials.  
EYE PROTECTION ..... Chemical splash proof goggles.  
OTHER PROTECTIVE EQUIPMENT ..... Suitable working clothes fully protecting the body. A safety shower and eye bath should be available. For operations where spills or splashing may occur, use an impervious body covering and boots.  
HANDLING PROCEDURES AND EQUIPMENT ..... Do not produce dust. Handle far from other chemicals. Keep from ignition sources. Keep in closed container (not metallic or wooden) in a fresh, dry, ventilated place. If stored near other products, place near exit door for quick removal if necessary.

---

---

## SECTION IX - SPECIAL PRECAUTIONS

---

---

# Material Safety Data Sheet

---

---

HAZARD CLASS ..... Oxidizer, 5.1, PG II  
DOT SHIPPING NAME..... Trichloroisocyanuric Acid, Dry, Mixture  
UN NUMBER..... UN2468  
REPORTABLE QUANTITY (RQ)..... Not Listed

---

---

## REFERENCES

**WARNING!! STRONG OXIDIZING AGENT -  
USE DRY, CLEAN UTENSILS - KEEP  
AWAY FROM NATURALLY OCCURING  
ORGANIC MATERIALS. ZZ1CLTRI**  
Product is toxic for fishes and algae. It may give  
off chlorine in contact with other products. Do  
not flush to waterways. EPA REG.# 57787-19  
HMIS RATING: H-3, F-1, R-2